

INSTRUCTIONS FOR SUBMISSION OF SPECIMENS FOR VIRUS ISOLATION AND ENTEROVIRUS BY PCR FROM CSF

Michigan Department of Community Health

NOTICE: CHANGES IN SPECIMEN COLLECTION KITS AND INSTRUCTIONS

The specimen collection kit, VIRAL INFECTIONS & PCR ON CSF (Unit 45), and collection instructions, INSTRUCTIONS FOR SUBMISSION OF SPECIMENS FROM VIRUS ISOLATION AND ENTEROVIRUS BY PCR FROM CSF have changed.

The collection kit now includes two different types of swabs, a flexible metal-shafted swab for nasopharyngeal (NP) specimen collection and a stiff, plastic-shafted swab for throat and lesion fluid specimen collection.

The directions have been changed to reflect the need for different swabs under different circumstances. A more complete set of collection instructions for NP swabs has been included as well as a diagram for NP swab collection. Finally, a recommendation on expected viral recovery has been included for each specimen type.

These changes were made as a part of routine quality assurance activities in an attempt to improve viral recovery. NP swabs are the recommended specimen for culture of the influenza virus.

IMPORTANT: Specimens not properly labeled, test requisitions not completed or failing to match specimen labels will result in specimens not being tested.

NOTE: If this is part of an outbreak investigation, you must indicate the name of the outbreak under “Test Reason” on the test requisition as testing of this type must have prior approval from the Bureau of Epidemiology.

Freeze coolant upon receipt of this Unit!

1. Complete a test requisition for **each** specimen submitted indicating the virus suspected. Place requisition(s) in plastic bag provided to protect them from moisture.
2. Collect the specimen(s) appropriate for the disease or agent suspected (refer to Laboratory Services Guide – <http://www.michigan.gov/mdchlab>)
 - a. **Feces** – Recommended for Enterovirus recovery. Collect an olive-sized portion of formed feces or 10 mL of liquid stool. Place in sterile 50 mL tube provided.
 - b. **CSF** – Recommended for Enterovirus and Mumps virus recovery. Submit 3-5 mL of spinal fluid in a sterile, plastic, tightly capped tube (not provided). **Note:** A minimum of 0.5 mL is required for PCR analysis.
 - c. **Lesion Swabs** – Recommended for Herpes virus recovery. **Check outdate on viral transport. Use the stiff, plastic-shafted swab provided.** Rupture early-stage lesions containing clear fluid with a sterile scalpel blade. Blot the excess fluid with the swab and gently rub the base of the lesion with the swab to collect infected cells. Place swab in transport vial and rotate the swab in the transport medium. **Express swab** by pressing it against the side of the vial and **discard swab** properly.
 - d. **Upper Respiratory Tract Specimens – Check outdate on viral transport.**
NP Swabs – Recommended for Respiratory virus recovery. See attached figure.
 1. Use flexible metal-shafted swab provided.
 2. Select an unobstructed nostril.
 3. Provide the patient with tissues. Instruct them to blow their nose to remove mucus. A second tissue may be needed for watery eyes.
 4. Position the person’s head leaning gently back (about 70°) against a wall.
 5. Aseptically remove the sterile flexible swab from package.
 6. Hold swab lightly between the thumb and index finger thus allowing a quick release in the event the patient moves.
 7. Place the swab in the nostril and gently follow the septum beyond the external nares. If any resistance to insertion occurs, **STOP** immediately to prevent injury.
 8. In an adult, the swab should be inserted 4-6 cm or approximately 2/3 of the length of the swab.
 9. Rotate the swab gently in place for a few seconds to absorb cells.
 10. Withdraw the swab and insert into transport vial. Rotate swab in the transport medium. Express and discard as in 2c above.

Throat Swabs – Recommended for Enterovirus and Mumps virus recovery.

1. Use the stiff, plastic-shafted swab provided.
2. Moisten swab with saline and vigorously rub over tonsils and pharynx. Place swab in transport medium, rotate, express and discard as in 2c.

NP Aspirates – Recommended for Respiratory virus recovery.

1. Collect specimen using a sterile rubber bulb syringe and place in the transport media provided.

NP Washes – Recommended for Respiratory virus recovery.

1. Collect with sterile saline and sterile rubber bulb syringe, and place in a sterile container. **Do not add to transport media.**

e. **Urine** – Recommended for CMV and Mumps virus recovery. Submit 10 mL of clean catch or catheter-collected urine in sterile 50 mL tube provided.

f. **Autopsy or biopsy material** – Submit a large piece of tissue in sterile 50 mL specimen tube provided; place smaller pieces of tissue in transport medium, one piece per vial, to prevent drying.

3. Tighten caps securely on all vials and tubes.
4. Label all specimens with the same name/unique identifier used on the test requisition. Record the name/unique identifier, as you will use it to link the specimen to the patient.
5. Refrigerate all specimens – DO NOT FREEZE – until ready to ship by the most rapid means to the laboratory.
6. When ready to ship, place properly labeled specimen vial(s), **wrapped in absorbent provided**, into aluminum screw-capped can(s) and secure cap. Place aluminum can with **completed** test requisition into screw-capped cardboard container and **secure cap with tape**.
7. Place cardboard container(s) into Styrofoam container, along with refrigerant provided. **Complete** and apply return shipping, Biological Substance label to corrugated shipping box and ship by the most rapid and convenient means available (e.g. courier, bus, U.S. Express mail etc.) to the Lansing laboratory. Transit time is not to exceed 48 hours. If there are any questions, contact the Bureau of Laboratories at 517-335-8067.

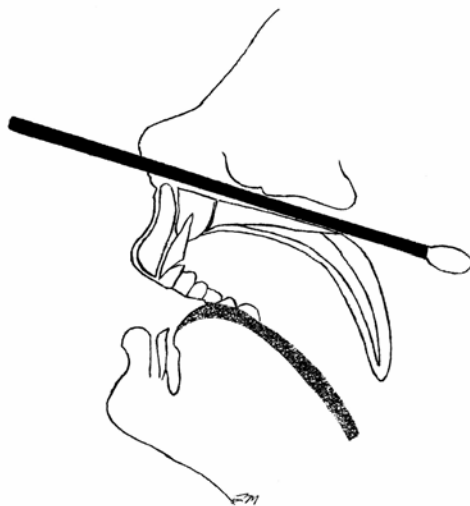


Figure - Diagram of NP Swab Collection.

NOTE: The shipper is responsible for being sure that their package is in compliance with the current shipping regulations.